

in each instance, a definitional phrase in lieu of the abbreviations. The first use of ID in the application included such a definitional phrase. Attention is drawn to paragraph [0005] in the PTO published application, describing prior art, wherein ID is defined as “inside diameter (ID) prior to forming that was significantly smaller than the shaft diameter.” Note also [0008] and [0017] wherein ID is coupled with “as machined.” Thus it is to be understood that in this application, ID of a part-of-a-seal (such as the ID of a wiper lip) indicates the distance between diametrically opposed tips of the part-of-a-seal as machined (i.e. prior to the part-of-the-seal being formed onto the shaft’s outside) and is compared to the diameter (often indicated as the shaft OD and as element 25) of the shaft that the part-of-a-seal is to be used with. No new information is added by describing the preceding as equivalent to the following:

If a part-of-a-seal has its ID smaller than the associated shaft’s OD, then when the seal is formed onto the associated shaft there will be interference between the part-of-the-seal and the surface of the associated shaft. (prior art.)

If a part-of-a-seal has its ID greater than the associated shaft’s OD, then when the seal is formed onto the associated shaft there will not be interference between the part-of-the-seal and the surface of the associated shaft. (preferred in the present invention) Note the consistent information contained in paragraph [0017] of the PTO published application as follows:

“A desirable utility in having a wiper lip with an ID, as machined, that is larger than the shaft OD, and yet, because of the hinge groove, able to contact the shaft when in operation, arises when initially installing the seal. Because the preferred wiper lip of the present invention does not touch the shaft while the seal is being installed, damage to the wiper lip is minimized and ease of installation is maximized. These advantages apply primarily where, during installation, the shaft enters the seal and engages the sealing element from the atmosphere side of the seal.”

It is submitted that within the application-as-filed the terms of concern are adequately defined and are well understood by practitioners of the art. Claims 71, 72 and 73, using no new material, are offered that clarify the language usage of the application. Please withdraw this objection as the terms have been spelled out as requested by the examiner and because the terms are adequately defined within the specification.

§12 The examiner objected to aspects of the drawings that are no longer included in the claims at

issue. Please withdraw this objection.

§13 The examiner objected to the use of ID and OD in certain claims and requested that those terms be spelled out. The requested spelling-out has been effected. Please withdraw this objection.

§14 Claims that have been canceled were rejected by the examiner for various reasons. These rejections are now moot. Please withdraw those rejections.

§15 Claim 50 (herein recast as claim 71) and claim 64 (herein recast as claim 72) were rejected by the examiner under 35 USC 102(e) as being anticipated by US Patent number 5,915,696 to Onumal et al (the reference). These two rejections are the only rejections remaining after the cancellation of the other claims. The two remaining rejections are discussed together in the next section.

§16 On page 7 of paper three, the examiner rejected claim 50 (herein recast as claim 71) under 35 USC 102(e) as being anticipated by US Patent number 5,915,696 to Onumal et al. New claim 73 is also a recasting of claim 50. The examiner used these words:

“Regarding claim 50, the Onuma et al. Reference discloses a wiper lip (26) that has a greater interior diameter then (sic.) the outer diameter of the shaft. Note that since the lip is on the outer surface of the shaft, that the inner diameter of the lip has to be greater than the outer diameter of the shaft.”

On page 8 of paper three, the examiner rejected claim 64 (herein recast as claim 72) under 35 USC 102(e) as being anticipated by US Patent number 5,915,696 to Onumal et al. The examiner used these words:

“Regarding claim 64, the Onuma et al. Reference discloses a wiper lip (26) that has a greater interior diameter then (sic.) the outer diameter of the shaft. Note that since the lip is on the outer surface of the shaft, that the inner diameter of the lip has to be greater than the outer diameter of the shaft.”

The examiner rejected the two claims-in-consideration using the same words. Thus, these two rejections are discussed together.

Since the only remaining rejections use 35 USC 102(e), it is appropriate to note the requirements of a 102(e) rejection as found in the law. Although the words of 102(e) were not provided by the examiner, they are well known to be:

**35 U.S.C. 102 Conditions for patentability; novelty and loss of right to patent.**

A person shall be entitled to a patent unless -

(e) the invention was described in - (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for the purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language;

The following short quotations from case law provide the basis for dealing with 102(e) rejections.

***Akzo N.V. v. United States Int'l Trade Comm'n***, 1 USPQ 2d 1241, 1245 (Fed. Cir. 1986), *cert. denied*, 482 U.S. 909 (1987)

Under 35 U.S.C. §102, anticipation requires that each and every element of the claimed invention be disclosed in the prior art. . . . In addition, the prior art reference must be enabling, thus placing the allegedly disclosed matter in the possession of the public.

***Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co.***, 221 USPQ 481, 485 (Fed. Cir. 1984)

Anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim.

***ATD Corp. v. Lydall, Inc.***, 48 USPQ 2d 1321, 1328 (Fed. Cir. 1998)

An anticipating reference must describe the patented subject matter with sufficient clarity and detail to establish that the subject matter existed and that its existence was recognized by persons of ordinary skill in the field of the invention.

***In re Bass***, 177 USPQ 178, 186 (C.C.P.A. 1973)

From the evidence available to it, the initial burden of making out a prima facie case of prior invention is on the Patent Office.

The essence of the statute and the case law is that the Patent Office must show that a solitary reference (here, US Patent number 5,915,696) contains each and every element of the rejected claims, that those element are arranged as in the rejected claims, and that the reference discloses the aforementioned elements in a detailed and enabling manner so that a person of ordinary skill in the art would recognize in the reference the existence of what is claimed. The burden on the Patent Office is not satisfied with the quoted words from paper three, pages 7 and 8. Furthermore, even if a prima facie case is presented by the Patent Office, the other requirements of a 102(e) rejection fail.

A prima facie case is not presented by the quoted words from paper three, pages 7 and 8 because those words do not even allege the existence of all of the elements of the claims-at-issue to be disclosed by the reference. Alleging only one element is insufficient. The words continue as follows: "Note that since the lip is on the outer surface of the shaft, that the inner diameter of the lip has to be greater than the outer diameter of the shaft." Element 26 is mentioned only once in the reference (Column 3, line 22) and is called "a dust sealing lip." Element 26 is never described as being at a particular place in the reference and, in particular, not on the outer surface of a shaft. Additionally, it appears that the words "inner diameter of the lip has to be greater than the outer diameter of the shaft" are being used in a manner inconsistent with the usage within the instant specification and within the claims-at-issue. If element 26 were on the outer surface of the shaft, as contended without pointing to where in the reference that fact is found, then, in the manner used in the application, the inner diameter of element 26 could not be greater than the outer diameter of the shaft. Furthermore, while the Patent Office does not even allege that all of the subject matter of the claims exists within the reference, the Patent Office makes no claim that the existence of the subject matter of the claims would be recognized by persons of ordinary skill in the field of the invention from a study of the reference. The Patent Office has not met its required burden with respect to the rejections. Please withdraw the remaining rejections.

Even though the Patent Office has not satisfied the requirement of presenting a prima facie case of obviousness between the claims-at-issue and the disclosures of US Patent number 5,915,696, a sufficient reason to withdraw the remaining rejections is to be found in the lack of a

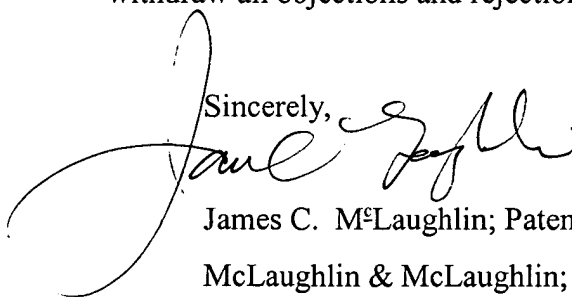
disclosure of the claims-at-issue within US Patent number 5,915,696 (the reference). Element 26 of the reference is mentioned exactly once in the reference (Column 3, line 22) and is called "a dust sealing lip." Element 26 of the reference is marked only once on the drawings (Figure 1). Not even the slightest hint is provided in the reference about the subject matter of the claims-at-issue. One of ordinary skill who studied the reference could not find a description of the claimed subject matter within the reference that has sufficient clarity and detail to establish that the subject matter existed in the reference and that its existence was recognized because there is no mention of the subject matter of the claims-at-issue within the reference. Indeed, because of the absence of the elements of the claims-at-issue within the reference and the completely non-obvious use in the present invention of a wiper lip having an inside diameter (ID) prior to forming the shaft-sealing-element onto the shaft that is greater than the outside diameter (OD) of the shaft, it is obvious that one of superior skill in the art could not find the present invention described in the reference even if the person who is of superior skill had the present application in-hand!

The Patent Office has not made a prima facie case of anticipation because the first element of a prima facie case (contending, and then proving, that the reference discloses each and every element of the claimed invention, arranged as in the claim) is not satisfied. Furthermore, with only one mention in the reference of one possible element in the claims-at-issue and no enabling description whatsoever, it is not possible to show anticipation nor obviousness.

Withdrawal of the rejections is requested.

§17 Presentation has been provided within paper four for ample reasons to withdraw all objections and rejections that might be applicable to the claims-at-issue. Request is made to withdraw all objections and rejections, and to pass the application on to issue.

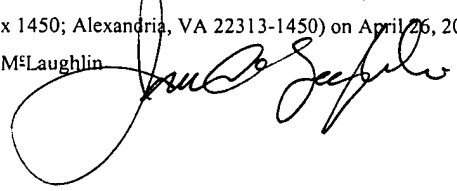
Sincerely,



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This document, a check, SB21, SB22, and a postal card were mailed using Express Mail Post Office to Addressee (Commissioner for Patents; P.O. Box 1450; Alexandria, VA 22313-1450) on April 26, 2006 at the Post Office of Lennon, Michigan using label number EQ160160206US by James C. McLaughlin



- 71     An improved housed shaft sealing element that has a flex area between the part of the sealing element to bear on the shaft and the part of the sealing element clamped in the housing, wherein the improvement comprises:  
a circumferential hinge groove in the flex area having a depth less than the thickness of the sealing element in the flex area; and  
a wiper lip including an ID (inside diameter) of said wiper lip that is greater than the OD (outside diameter) of the shaft.
- 72     An improved housed shaft sealing element that has a flex area between the part of the sealing element to bear on the shaft and the part of the sealing element clamped in the housing, wherein the improvement comprises:  
tapering the thickness of the part of the seal bearing on the shaft;  
a circumferential hinge groove in the flex area having a depth less than the thickness of the sealing element in the flex area; and  
a wiper lip including an ID (inside diameter) of said wiper lip that is greater than the OD (outside diameter) of the shaft.
- 73     An improved housed shaft-sealing-element that has a flex area between the part of the sealing-element to bear on the shaft and the part of the shaft-sealing-element clamped in the housing, wherein the improvement comprises:  
a circumferential hinge groove in the flex area having a depth less than the thickness of the shaft-sealing-element in the flex area; and  
a wiper lip having an inside diameter (ID) prior to forming the shaft-sealing-element onto the shaft that is greater than the outside diameter (OD) of the shaft.